



1                   IN THE UNITED STATES DISTRICT COURT  
2                   FOR THE NORTHERN DISTRICT OF OHIO  
3       DEBORAH GALOSKI,                   )  
4                   Plaintiff,                   )  
5           vs.                   ) No. 1:14-cv-00553  
6       APPLICA CONSUMER PRODUCTS,       )  
7       INC.,                    )  
8                   Defendant.               )

9           The deposition of PAUL W. BORTH, Ph.D., BCE,  
10       called for examination pursuant to Notice and the  
11       Rules of Civil Procedure for the United States  
12       District Courts pertaining to the taking of  
13       depositions, taken before Elizabeth L. Vela, an  
14       Illinois Certified Shorthand Reporter, at One North  
15       Wacker Drive, Chicago, Illinois on the 26th day of  
16       January, 2017, at the time of 9:16 a.m.  
17       (Proceedings concluded at 3:55 p.m.)

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23       Reported by: Elizabeth L. Vela, CSR  
24       License No.: 084-003650

<p style="text-align: right;">Page 106</p> <p>1 thing, let's just say .25, there might have been 2 significance. 3 Q. So I want to understand this. Is this a 4 level of specificity about the results that he 5 reached or is that too simplistic? 6 A. No. It's -- .05 is common in pest 7 management and efficacy studies to -- as kind of a 8 threshold of whether you have a treatment effect, 9 basically accepting the null hypothesis or not. 10 That's the threshold. Now, it's an arbitrary 11 setting, but it's commonly used. 12 Q. Okay. So it's a commonly accepted 13 standard -- 14 A. It is. 15 Q. -- in the academic community? 16 A. Yes. I would also -- the answer is yes. 17 Since it's arbitrary, every researcher can set it 18 a priori to what they think is the right thing to 19 do. You might set it lower than that. You might 20 set it higher than that. 21 Just by way of explanation, if you're in a 22 very controlled laboratory situation, you could get 23 significance at a lower level. When you're 24 outdoors, where there's more factors that can</p>	<p style="text-align: right;">Page 108</p> <p>1 there was no statistically significant treatment 2 effect? 3 A. Correct. 4 Q. Okay. He goes on to say the level of 5 repellency observed may not be of commercial 6 significance. That's the fourth bullet point. 7 A. It is. 8 Q. In your experience working for a long 9 time, what I think was 27 years for a company that 10 produced chemical applications to achieve -- or to 11 try to achieve repellency, if you got a report, 12 hypothetically, that a treatment you were 13 investigating was not statistically significant, 14 the researcher is telling you there's likely not a 15 level of repellency that may be of commercial 16 significance, what would you have done? 17 A. Personally, I would never have made a 18 binding decision based on one study. 19 Given the words in his fourth bullet 20 point, they were carefully chosen. And the word 21 may not be -- the words may not be of commercial 22 significance is his opinion. 23 And every company has their own culture, 24 let's say, or their own risk-taking. I don't know.</p>
<p style="text-align: right;">Page 107</p> <p>1 affect things, the researcher might readily set a 2 .10, because there's more things -- more 3 experimental error that can come into play. 4 Q. Okay. But this .05 level is -- 5 A. Yeah, it's -- 6 Q. -- generally accepted? 7 A. Yes, it is. 8 Q. And if we were to -- if we were to say -- 9 just so I'm understanding, hypothetically, had this 10 sentence read paired t-tests indicated that 11 differences in cockroach numbers were statistically 12 significant at P greater than .05, would that tell 13 you as a scientist that there was -- the treatment 14 that was being tested had some efficacy results 15 that were successful? 16 A. It would tell me that the specific 17 experiments that he did -- if his hypothesis was 18 that there was no difference between treated and 19 untreated, if there was a significant difference, 20 then that would tell me that there's a greater 21 likelihood that the treatment effect was true, that 22 there was a difference, it wasn't just due to 23 chance. 24 Q. So he's saying here that there was --</p>	<p style="text-align: right;">Page 109</p> <p>1 I'm beyond -- their own risk-taking profile. And 2 so some might take it and some might not. And he 3 doesn't know. 4 Q. A moment ago, you said you would never 5 rely on a single test. 6 That's because it's important to replicate 7 results, right, when you're trying to figure out if 8 something works? 9 A. Uh-huh. Yes. 10 Q. And it's important from a scientific 11 standpoint, correct? 12 A. Yes. 13 Q. Something that's generally accepted in the 14 scientific field -- 15 A. Yes. 16 Q. -- is that fair? 17 A. But what he did, he -- if you read -- 18 MR. FALKOF: There's no question pending. 19 THE WITNESS: Okay. 20 BY MR. BARTELA: 21 Q. For Device -- so you reviewed this. You 22 saw these results. 23 Did you go back and try to see if 24 Devices A through E had, for instance, frequency</p>